

CLAIMS

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1. Automobile door or compartment-cover holder to fix in position a door or a cover for an engine or luggage compartment of an automobile during a processing event in the manufacturing procedure, in particular the application of a CDP coating and/or paint, constructed as a multi-part plastic holder or combined plastic-metal holder with contact or engagement sections disposed at or near more than one end to cooperate with engagement sections on parts of the vehicle body in order to fix the components at a prespecified distance from one another,
characterized in that
the engagement sections have a substantially peg-like structure or are shaped like a flat hook, and each set of two contact or engagement sections is connected together by way of a holder section that extends linearly or is bent at substantially a right angle.

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2. Automobile door or compartment-cover holder to fix in position a door or a cover for an engine or luggage compartment of an automobile during a processing event in the manufacturing procedure, in particular the application of a CDP coating and/or paint, constructed as a multi-part plastic holder or combined plastic-metal holder with contact or engagement sections disposed at or near more than one end to cooperate with engagement sections on parts of the vehicle body in order to fix the components at a prespecified distance from one another,
characterized by
an elongated first plastic part, at the one end of which is provided an engagement section, in particular having a sleeve shape, to engage an elongation rod, and its other end bears a second plastic part, pivotably mounted on a peg

that projects perpendicular to the longitudinal extent of the first plastic part, for the purpose of engaging an engagement section of an engine-compartment cover or a luggage-compartment cover.

- 5 3. Automobile door or compartment-cover holder according to
Claim 1,
characterized by a U-shaped or substantially plate-shaped handling section, so constructed as to be grasped manually or gripped by a gripping tool of a handling robot.
- 10 4. Automobile door or compartment-cover holder according to
Claim 2,
characterized in that the second plastic part has a substantially cuboid external shape, with a cylindrical first aperture to be engaged by the peg of the first
15 plastic part and with at least one elongated second aperture to be engaged by a section of a vehicle body part, in particular a bent metal bar.
5. Automobile door or compartment-cover holder according to
one of the preceding claims,
20 characterized in that the plastic holder or a plastic part of the plastic-metal holder consists to a substantial extent of a plastic resistant to high temperatures, which can be used in the long term at a temperature of at least 170°C.
- 25 6. Automobile door or compartment-cover holder according to
one of the preceding claims,
characterized in that the plastic holder or a plastic part of the plastic-metal holder consists of glass-fiber-reinforced polyamide containing a proportion of reinforcing
30 filler between 0.1% and 40%, in particular between 5% and 20%.

7. Automobile door or compartment-cover holder according to one of the preceding claims,
characterized in that the plastic holder or a plastic part of the plastic-metal holder consists to a substantial extent, in particular 50% or more and preferably 70% or more, of recycled material.

8. Automobile door or compartment-cover holder according to one of the preceding claims,
characterized in that the peg or hook sections have a prespecified degree of elasticity in both material and shape, so that they can be inserted into apertures provided for them in the body parts without damaging the surface, and are connected to one another by slightly flexible profile parts of the basic structure of a plastic holder,
in particular having the basic shape of a U or double-T profile.

9. Automobile door or compartment-cover holder according to one of the claims 1, 3 or 5 to 8,
characterized by being constructed as a door hook, having two hooks to engage the window shaft of a door and at least one peg to engage an opening in the door that serves for fixation of a door lining.

10. Automobile door or compartment-cover holder according to one of the claims 1, 3 or 5 to 9,
characterized by being constructed as a door hook extending within a plane defined by connecting sections between the engagement sections, wherein the substantially plate-shaped handling section has the shape of a circular ring in plan view and lies within a plane parallel to the plane in which the holder extends.

11. Automobile door or compartment-cover holder according to one of the claims 1, 3 or 5 to 10,

characterized by being constructed as a door hook composed of two parts, firstly a basic structure with several engagement sections to engage apertures in a vehicle door as well as, if desired, apertures or bearing surfaces in an adjacent part of the vehicle body, and secondly a substantially L-shaped pivot bar that can be pivotably set onto the basic structure and comprises engagement sections to engage apertures or to abut against sections of the vehicle body in the vicinity of the door.

10 12. Automobile door or compartment-cover holder according to one of the preceding claims,

characterized by a locking device that can be locked or released by linearly shifting two plastic parts with respect to one another, in order to fix the door or compartment cover of the automobile at a predetermined distance from the basic vehicle body or to release this fixation.

15 13. Automobile door or compartment-cover holder according to Claim 12 and one of the claims 3 to 12,

20 characterized in that the U-shaped or substantially plate-shaped handling section is attached to the locking device and is used to lock or release that device.